

Creating and Implementing a Paperless Process for Pipeline Safety:

Reducing Cost through Enhancing Efficiency

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I. Agency and Industry Background

The South Carolina Office of Regulatory Staff (ORS) was created with the enactment of Act 175 of 2004. The ORS is responsible for many of the non-adjudicative functions associated with utility regulation that formerly fell under the Public Service Commission of South Carolina (PSC). Prior to Act 175, the PSC handled all aspects of utility regulation. The creation of the ORS by Act 175 provided a revised structure for addressing the public interest that clearly separates the adjudicative function of utility regulation(which remains with the PSC) from the investigative, legal, prosecutorial, and educational roles (now with the ORS).

Specifically, the ORS has sole responsibility for inspecting, auditing, and examining public utilities. The agency must be considered a party of record in all filings, applications, or proceedings before the PSC.

The ORS is charged with representing the public interest of South Carolina in utility regulation for the major utility industries -- electric, natural gas, telecommunications, water/wastewater, and transportation -- before the PSC, the court system, the South Carolina General Assembly, and federal regulatory bodies. The ORS also has responsibility for oversight of railroad safety and natural gas pipeline safety in South Carolina.

Act 175 defines public interest as a balance among three essential components: the concerns of the using and consuming public; the financial integrity of public utilities; and the economic development of South Carolina.

In addition, Act 175 created a State Regulation of Public Utilities Review Committee. This ten-member committee is composed of six members of the S.C. General Assembly and four

representatives from the general public. The Agency is an "Other Funded" Agency, primarily through collection of Gross Receipts Taxes on the utilities and operators.

II. Problem Statement: Can PLS Be More Efficient?

The South Carolina Office of Regulatory Staff's Natural Gas Pipeline Safety Program (PLS) is located in the Electric and Gas Regulation Department of ORS. The Pipeline Safety Program consists of three (3) fulltime inspectors and one Pipeline Safety Supervisor who devotes twenty (20) percent of his duties to inspections, and eighty (80) percent of his duties to administration. It is responsible for enforcing State rules, regulations, and statutes regarding Natural Gas Pipeline Safety through periodic inspections of investor-owned, municipal and natural gas authority operating systems. The Program is also charged with enforcing federal rules, regulations, and statutes through a partnership with the Pipeline and Hazardous Materials Safety Administration (PHMSA), a bureau of the United States Department of Transportation. The Pipeline Safety Program has discovered opportunities for its natural gas pipeline safety inspectors to save both time and money. The current process for reporting non-compliances with federal and state rules and regulations can be more efficient. Currently, the Program uses a hard-paper documentation process for its inspection reports and letters to operators notifying them of non-compliances.

During the course of an inspection, inspectors generally take notes on compliance issues during a safety inspection. They will then return home to access their laptops, log on to the ORS network, complete their inspection reports, print the reports and then meet the Pipeline Safety Supervisor periodically or even travel to the ORS headquarters in Columbia to file reports. The four inspectors reside in Greenwood, Winnsboro, Kershaw, and Jefferson. The

Pipeline Safety Supervisor then reviews the paper reports and determines which operators are out of compliance. He is required to generate a non-compliance letter and then mails the letter to the operator within three (3) days. The operator is required to mail a response to the ORS within fifteen (15) days. The Pipeline Safety Supervisor reviews the response letter and if no additional correspondence is required, he stores the reports and letters in file cabinets.

One of the Agency's core goals is responsiveness to the public and the utilities. The Pipeline Safety Program considers responsiveness to be not only performing inspections immediately, but also performing them efficiently with the least amount of financial burden to the utilities, operators and ratepayers. If the Program can decrease the amount of time spent associated with hard-paper processes, then the Program can increase the amount of time performing inspections. Additionally, if the Program can eliminate hard-paper processes, then there will be a decrease in equipment cost (i.e. vehicle wear, office supplies, cameras, printers, etc.). The primary beneficiaries of these efforts will be cost savings to the Agency and therefore savings to the utilities, operators and ratepayers. Additionally, public safety will benefit as inspectors will have more time to engage in their core duty of pipeline inspections.

III. Data Collection: How Much Does Inefficiency Cost?

In order to have a better understanding of the costs that were involved in the paper processes, the first step was to contact the pipeline inspectors and Pipeline Safety Supervisor to discover what tools, materials and processes were being utilized in the paper Inspection process. This was solicited during one of the monthly staff meetings. Once these were gathered, the next step was to determine the cost of the items that were being used. The cost was ascertained through our Internal Operations Department (bookkeeping). It was discovered

that the hard paper documentation process is costly. Use of paper processes for the non-compliance reports cost no less than \$3374.56 per year.

- Paper--15 pages per report on average X 120 reports per year per inspector X 3.2 inspectors X \$.006 for each sheet of paper (\$34.56 per year)
- Storage Cost of files (undetermined)
- Printer/Ink Cost (\$140 per year)
- Laptop and Camera Cost, including air card (\$1880 per year)
- Extra Mileage Cost for Delivering Reports to Supervisor (\$1320 per year)

Use of the paper process for issuing non-compliance letters to operators that are out of compliance is costly and inefficient as well. The cost of the paper process for issuing non-compliance letters is no less than \$99.84 per year.

- Paper--40 letters per year X \$.006 for each sheet of paper X \$.49 for postage (19.84 per year)
- Storage Cost of files (undetermined)
- Printer/Ink Cost (\$80 per year)

The total cost for the paperless process is \$3474.40. At this time, it is not possible to calculate the loss in productivity due to the paper process. Time spent transcribing notes from notepads to reports and travel time spent filing inspection reports with the Pipeline Safety Supervisor could be spent on the Program's core duty---inspections.

IV. Data Analysis: How Much Does Efficiency Cost?

It was hypothesized that eliminating paper and allowing inspectors to simultaneously complete inspections and inspection reports would decrease cost and increase efficiency. As a

result, the following plan and presentation (Appendix A) was conceived and presented to the Department Director and Deputy Director:

The Pipeline Safety Program proposes to purchase four iPads/tablets with a stylus for each of the four inspectors. Next, all Pipeline and Hazardous Materials Safety Administration ("PHMSA") and Office of Regulatory Staff ("ORS") forms will be downloaded on the iPad/tablet. This will allow inspectors to complete all forms while simultaneously performing inspections, to file reports instantaneously, to eliminate the need for laptops and cameras, to have more time for inspections, and to save money for the agency. Total Start-up Cost for the first year is a maximum of \$3840 and a minimum of \$2840.

- Tablets start at \$350 to iPads \$600. ($\$350 \times 4 = \1400 , $600 \times 4 = \$2400$)
- Data plan \$30 per month ($\$30 \times 4 \text{ Inspectors} \times 12 \text{ months} = \1440)
- IT support (downloading of the "Dropbox" application) \$0.00

However, at a 3 year average (the lease on the laptops is 3 years) the total cost will be \$1906.67 per year for the tablets and \$2240 per year for the iPads.

In order to further reduce cost the Pipeline Safety Program also proposes that all future correspondence with operators that result from inspections be paperless. All non-compliance letters and follow-up inspection letters will be emailed. The department will also require operators to file responses electronically. The benefits that will result from this move include: saving time from the delivery of U.S. mail, a decrease in ORS mandated response time, savings on postage, paper, and office supplies, reduced need for administrative assistant, and allow the Pipeline Safety Supervisor to conduct more inspections. Total start-up cost for moving to a

paperless correspondence process will be \$0.00 as the agency already has the tools in place to accomplish this goal.

Total Cost of Paper Process \$3474.40 (per year)

Total Cost of Paperless Process -\$1906.67 (per year for tablets) -\$2240 (iPads)

SAVINGS to AGENCY \$1567.73 (per year for tablets) \$1234.40 (iPads)

V. Implementation Plan: Electronic Inspections

The essence of the paperless plan is to relieve the inspectors of the multiple tools that they are currently assigned and replace them with one or two tools so that they can better focus on inspections. In order to effectively execute their assignments, inspectors are currently assigned laptops and air cards through which they access the ORS servers for their inspection reports, access to email and internet, inspection logs, rules and regulations as well as other databases. They are also assigned cameras and cell phones.

The first step of the implementation process was to solicit responses from other states' pipeline safety programs regarding their use of technologies in completing inspection reports (Appendix B) as well as research other industries in which electronic reports were being utilized (Appendix C). It was discovered that several state programs have already moved toward electronic inspection reports. Many programs offered examples of the tablets that they were using as well as any software that may be necessary.

The next step in implementation was to research and decide which tablet may be best for the Program. It was determined that the iPad suited the Program best for two reasons.

First, the Agency already maintained several iPads for employees to use. This allowed for

experimentation during the process (i.e. experimenting with different applications). Second, as most of our inspectors are hesitant and apprehensive towards new technologies, the familiarity that the iPad name and its ease of use were determined to be comforting to the inspectors.

Once it was established that the goals of efficiency could be met by transitioning to a paperless system, a proposal presentation (Appendix A) was presented to the Department Director and Deputy Director. Both were pleased with the goals of the proposal but asked for several clarifications (i.e. detailed cost of the proposal as presented above).

Once the proposal was approved, one of the ORS stock iPads was downloaded with the "Dropbox" application (Appendix D). Next, all forms and references that are needed to perform inspections were filed into Dropbox. Then, the application "CloudOn" was downloaded (Appendix E). This allows for the manipulation of Word, Excel, and PowerPoint programs. The iPad was tested to ensure that one could remotely log into email, etraining, myscemployee, and WinDOT (federal program containing rules, regulations and interpretations).

The next step will be to pilot the program with the youngest and most technologically advanced Pipeline Inspector for one week. He will be asked to turn in his lap-top, air card, and camera. The iPad will replace these items. The inspector will be instructed and trained on accessing and using email, etraining, myscemployee, and WinDOT from the iPad. The inspector will also be instructed on how to access Dropbox, find the appropriate inspection forms, complete the inspection form using CloudOn, and most importantly how to return the completed form into Dropbox so the Pipeline Safety Supervisor can retrieve the document from his desktop. At the end of the week, there will be a debriefing performed to analyze the positives and negatives of the new system.

A meeting will then take place with the Director and Deputy Director to determine how to overcome the obstacles that may have been discovered and to determine if any of the obstacles that were faced during the pilot cannot be overcome. Then, necessary steps will be taken to resolve any issues that occurred during the pilot period and the inspector will undertake a second pilot week to ensure that all obstacles have been overcome.

Should all issues be resolved, the final step would be to purchase four new iPads and download the appropriate applications, email, and web applications. Then all inspectors will be instructed on the use of all programs and applications for use in their day to day inspection reports. The Pipeline Safety Supervisor will be required to check the Dropbox at the end of each day for inspection reports.

VI. Implementation Plan: Non-Compliance Letters

In order to implement a paperless system for notifications of non-compliance to the operators, several simple steps need to be taken. A written letter will be composed and sent to each natural gas operator in the state explaining that in order to save time and money, the Pipeline Safety Program will now issue all non-compliance and non-compliance follow-up letters through email beginning on a date approved by the Director and Deputy Director. The letter will also have the Pipeline Safety Supervisors email address and a contact update for each of the operators to complete and return to ORS. Also, it will be requested of the operators that all responses to notices of non-compliance are returned via email.

Once the new procedures begin on the agreed upon date, the Pipeline Safety Supervisor will open a file on his hard drive for each of the natural gas operators. All inspection reports, non-compliance letters, non-compliance responses, and any other pertinent information or

correspondence pertaining to the inspections will be kept in the appropriate folder. The "Procedures and Guidelines for Pipeline Safety" handbook (Exhibit F) will then be updated to reflect the paperless procedures as approved by the Director and Deputy Director.

VII. Evaluation Method: Electronic Inspections

The two main goals are increased pipeline safety inspections and decreased cost. For the Fourth Quarter of 2013, the Pipeline Safety Program performed 110 inspections. For the calendar year 2013, the Program performed 411 inspections or an average of 102.75 inspections per quarter. In order to evaluate if the electronic system in inspection reporting has allowed for more efficiency, the number of inspections performed each quarter will be compared to the previous year's quarter to determine if there has been an increase in inspections and therefore efficiency due to the moving to the an electronic system. Also, at the end of the calendar year, the 2013 total inspection numbers will be compared to the 2014 inspection numbers. Evaluating for cost savings with inspection reporting will be more long term evaluation. The cost for the paperless inspection system is depreciated over a three year period. Therefore, the invoices for the purchasing of tablets, software and data plans will be compared to the invoices of our current computer cycle (including laptops, paper, printers, cartridges, cameras) over a three year period.

VIII. Evaluation Method: Non-Compliance Letters

In order to evaluate cost savings in regards to the non-compliance letters, the invoices for offices supplies such as paper, printers, and ink for 2014 will be compared to the invoices for the same items in 2013. In order to evaluate efficiency, a log will be kept in which the Pipeline Safety Supervisor will record the time and date that an inspection report is received

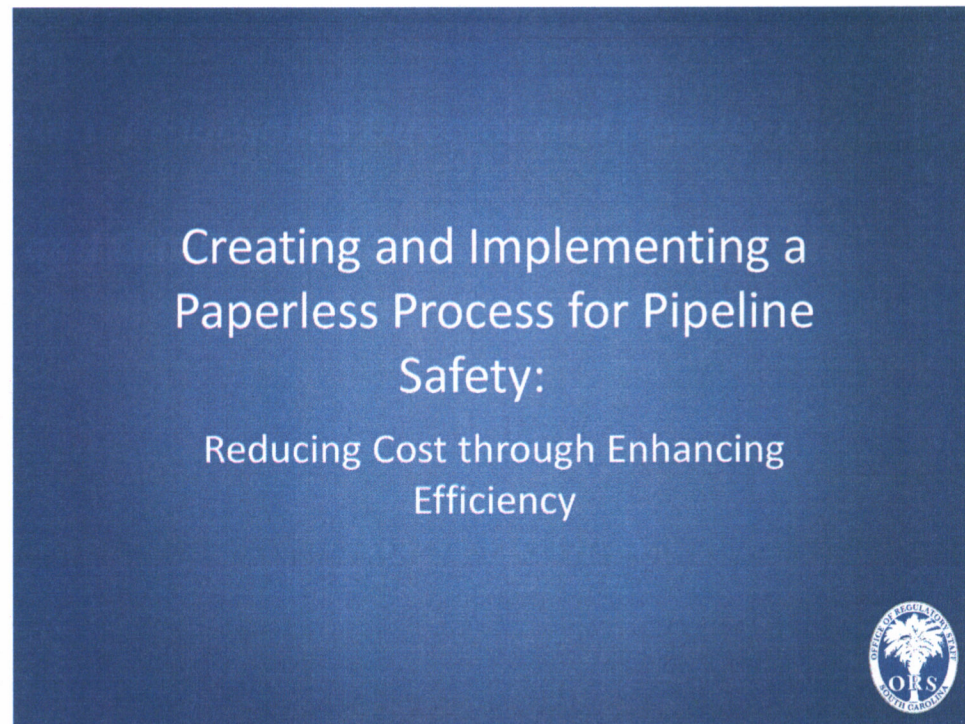
electronically, the time and date a non-compliance letter to the operator is mailed, and the time and date that the response to the non-compliance letter is received from the operator. Currently, this process takes approximately eighteen (18) days on average in the paper process. The log will demonstrate whether the electronic process is decreasing the amount of time it takes to send out non-compliance letters and to receive the responses from the operators.

IX. Summary and Recommendations: Paperless System Meets the Agency Goal of Responsiveness

If the department moves to a paperless system, the Agency will save time and money and is therefore a more responsive entity. Many utilities are moving towards a paperless system (i.e. "meter readers" and Piedmont Natural Gas Pipeliners). Moving away from cumbersome laptop computers in favor of lighter tablets allows inspectors to complete their inspection reports immediately and more accurately and in the long term saves the Agency money. Additionally, inspectors are much more mobile while conducting their inspections. Inspecting pipe welds in a ditch or regulator stations in the middle of a plowed farm field is less burdensome with a tablet than a laptop. Allowing non-compliance letters and all correspondence to be performed electronically will decrease operator response times to the non-compliance letters issued by ORS but will also eliminate the need of buying costly office supplies. The long term goal is to move to efficiency and this will make the public safer and have a positive impact on inspector moral. However, the one obstacle that remains is having final approval by the Executive Director of ORS for the move to a paperless system. Once this obstacle is overcome, then the Pipeline Safety Program will be able to implement its plans towards achieving its goal of becoming completely paperless.

Appendix A

Power Point Proposal to Director and Deputy Director of Electric and Gas Regulation



(double click to access power point)

Creating and Implementing a Paperless Process for Pipeline

Safety:

Reducing Cost through Enhancing
Efficiency



Opportunities to Save Time

- Process for reporting non-compliances with Federal and State Rules and Regulations can be more efficient
- Currently use hard-paper documentation process

Inspectors generally:

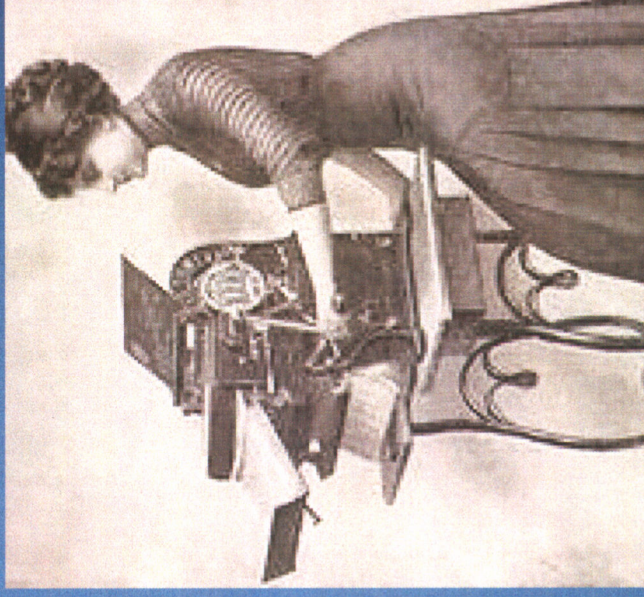
1. take notes while performing inspections.
2. return home to access their laptops and log on to ORS system.
3. complete inspection reports on laptop and then print.
4. meet the pipeline safety supervisor periodically or travel to the office to turn in reports.



Opportunities to Save Time

The Pipeline Safety Supervisor will then:

1. review the paper reports.
2. determine which operators are out of compliance.
3. generate and mail a paper letter notifying the operator of their non-compliance issues.
4. receive a paper response from the operator.
5. store all reports and letters in file cabinets



Opportunities to Save Money

For Non-Compliance Reports:

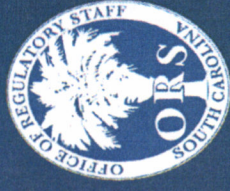
- Paper—3-169 pages per report X 120 reports per year per inspector X 3.2 inspectors X cost of paper
- Storage Cost of files
- Printer/Ink Cost
- Laptop, Air Card and Camera Cost
- Extra Mileage Cost for Delivering Reports to Supervisor
- Miscellaneous Office Supplies



Opportunities to Save Money

For Non-Compliance Letters:

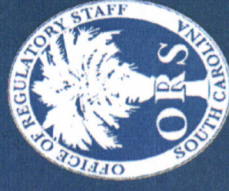
- Paper—30 to 40 noncompliance notifications plus additional correspondence
- Postage
- Storage Cost of files
- Printer/Ink Cost



Can We Calculate the Loss in Productivity?

- Missed incident notification in the field
- Time spent transcribing notes from notepads to reports and travel time spent filing inspection reports with the Pipeline Safety Supervisor....

Could be spent on our core duty---Inspections

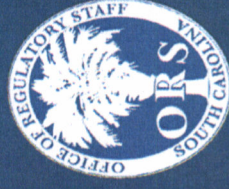


Our Goal

- If we can decrease the amount of time spent associated with hard-paper processes, then we can increase the amount of time performing inspections.
- If we can eliminate hard-paper processes, then we will have a decrease in equipment cost (vehicle wear, office supplies, cameras, printers etc.)

Primary Beneficiaries:

Public Safety and Cost Savings for ORS



Proposal

1. Purchase Four iPads/tablets with stylus
2. Download All PHMSA and ORS forms



Benefits

- Instant Notification via email of any incidents
- Complete all forms while simultaneously performing inspection
- Filing reports instantaneously
- Rid of laptops and cameras
- More time for inspection, less cost to agency
- Savings on File Storage Cost, Office Supplies, Vehicle Wear

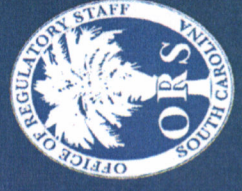


Cost to ORS

Tablets or iPads

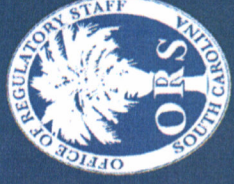
Data plan

IT support



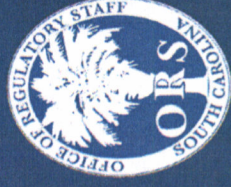
Proposal

1. All Correspondence with Operators that result from inspections will be paperless
2. All non-compliance letters and follow-up inspection letters will be emailed
3. Require Operators to file responses electronically



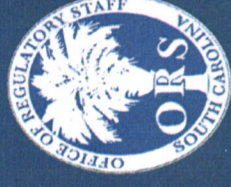
Benefits

- Save time--No more waiting for U.S. Mail
- Can Decrease ORS mandated response time
- Save Money on Postage, Paper, Office Supplies, and Equipment
- Administrative Assistant available for other E&G tasks
- Pipeline Safety Supervisor available for more inspections



Conclusion:

- Moving to a paperless system will save time and money.
- Many Utilities, PHMSA and FRA are moving towards paperless system.
- Move to Efficiency will make the public safer and have a positive impact on Inspector moral.



References

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<http://www.inspect2go.com/checklists/>

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<http://www.reporternews.com/news/2012/feb/02/afd-to-add-ipad-to-technology-to-firefighting/>



Cost of the Paper Process—Non Compliance Reports

1. Paper

(15 pages per report avg. X 120 reports per year per inspector X 3.2 inspectors X \$.006)

\$34.56 per year

2. Printer and Ink

\$140.00 per year

3. Laptop & Camera

(includes air card)

\$1880.00 per year

4. Extra Mileage Cost

(cost for delivering reports to Pipeline Safety Supervisor

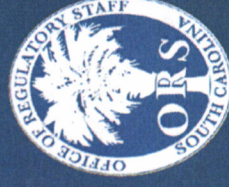
\$1320 per year

5. Storage Cost of Files

Undetermined

Noncompliance Report Cost:

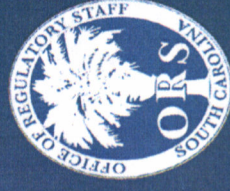
\$3374.56



Cost of the Paper Process—Non Compliance Letters

- | | |
|--|------------------|
| 1. Paper | \$19.84 per year |
| (40 Letters per year X \$.006 for paper X \$.49 for postage) | |
| 2. Printer and Ink | \$80.00 per year |
| 3. Storage Cost of Files | Undetermined |

Noncompliance Letter Cost: \$99.84



Total Cost to ORS for Paper Process

Minimum of \$3474.40

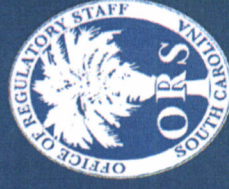


Cost to ORS

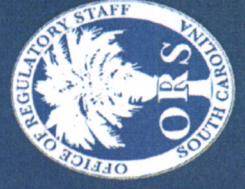
- iPads \$600.00
- (tablets) \$350.00
- Data Plan \$30.00 per month
- IT Undetermined
- Total Start-up Cost for first year is minimum \$2840
- At a 3 year average, the cost to the agency is \$1906.67
- Savings to the Agency?

Cost of Paper Process (Per year)	\$3474.40
Cost of Paperless Process (per year)	-\$1906.67

SAVINGS to AGENCY (per year)	\$1567.73
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QUESTIONS OR COMMENTS?



Appendix B

Solicited Responses from other State Pipeline Safety Programs



FW Tablets and Ipads.msg



FW Tablets and Ipads1.msg



FW Tablets and Ipads2.msg



FW Tablets and Ipads3.msg



FW Tablets and Ipads4.msg



RE Tablets and Ipads.msg

(double click to access correspondence)

Allen, Tom

From: Gainey, Vernon
Sent: Monday, January 06, 2014 9:59 AM
To: Hall, John
Cc: Allen, Tom
Subject: RE: Tablets and Ipads

John,

We, too, are looking into replacing our laptop computers with more advanced technology. I want us to have only one machine, perform daily inspection activities, and do administrative/record-keeping with the same machine. This includes accessing our agency main frame (several drives) and a couple other web-based applications for state employees that must be used for training requests, entering leave, submitting travel expense reports, etc. Are you familiar with an inspection software such a James Mergist mentioned? That sounds like a good set-up - if the new devices you choose will run the applications. Let us know what you find out and what you all decide to do. I appreciate any advice. If I learn more, I will let you know.

Regards,

Vernon L. Gainey, Supervisor
Pipeline Safety
Electric and Gas Regulation
SC Office of Regulatory Staff
1401 Main Street, Ste. 900
Columbia, SC 29201
803-737-0914 work
803-917-0487 cell
803-737-0896 fax
vgainey@regstaff.sc.gov

-----Original Message-----

From: Hall, John [<mailto:hall@ncuc.net>]
Sent: Friday, January 03, 2014 3:45 PM
To: napsr-pms@napsr.net
Subject: Tablets and Ipads

Happy New Year,

Our Commission is looking into providing pipeline safety inspectors with either a tablet or ipad as a tool to assist with inspection processes. I'd like to find out if any program is currently using one of these devices in the field, how it's being used, and if it's seen as an advantage in conducting safety inspections?

Any information or comment you have is appreciated.

Thank you,

John Hall

Director - Pipeline Safety Section

NC Utilities Commission

919-218-2320

hall@ncuc.net<mailto:hall@ncuc.net>

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties by an authorized state official.

Allen, Tom

From: Gainey, Vernon
Sent: Monday, January 06, 2014 9:51 AM
To: Allen, Tom
Subject: FW: Tablets and Ipads

FYI.

Vernon L. Gainey, Supervisor
Pipeline Safety
Electric and Gas Regulation
SC Office of Regulatory Staff
1401 Main Street, Ste. 900
Columbia, SC 29201
803-737-0914 work
803-917-0487 cell
803-737-0896 fax
vgainey@regstaff.sc.gov

-----Original Message-----

From: Robert Miller [<mailto:RMiller@azcc.gov>]
Sent: Friday, January 03, 2014 3:57 PM
To: 'Hall, John'; napsr-pms@napsr.net
Subject: RE: Tablets and Ipads

Good afternoon John,

I have provided my staff with semi-rugged dell lap top computers with daylight viewing screens that have been extremely useful in the field. Along with the computers they are furnished Verizon air cards for connectivity to the net and each have a Go-to-my-pc account in order to have full access to their desktop computers. Without access to their desk tops they were not getting the full use out of their computers even with the air cards. Being connected to their desk tops make any mobile location as good as working at their own desk.
Hope this helps,

Robert E. Miller
Pipeline Safety Section
Pipeline Safety Supervisor
2200 N. Central Ave., Suite 300
Phoenix, Az. 85004
Office - 602-262-5601
Fax - 602-262-5620
Email - rmiller@azcc.gov

-----Original Message-----

From: Hall, John [<mailto:hall@ncuc.net>]
Sent: Friday, January 03, 2014 1:45 PM
To: napsr-pms@napsr.net
Subject: Tablets and Ipads

Happy New Year,

Our Commission is looking into providing pipeline safety inspectors with either a tablet or ipad as a tool to assist with inspection processes. I'd like to find out if any program is currently using one of these devices in the field, how it's being used, and if it's seen as an advantage in conducting safety inspections?

Any information or comment you have is appreciated.

Thank you,

John Hall

Director - Pipeline Safety Section

NC Utilities Commission

919-218-2320

hall@ncuc.net<<mailto:hall@ncuc.net>>

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This footnote confirms that this email message has been scanned to detect malicious content.

If you experience problems, please contact postmaster@azcc.gov
=====

Allen, Tom

From: Gainey, Vernon
Sent: Monday, January 06, 2014 9:45 AM
To: Allen, Tom
Subject: FW: Tablets and Ipads

See request from our friend in NC regarding tablet computers. I'll forward a couple of other responses.



Vernon L. Gainey, Supervisor
Pipeline Safety
Electric and Gas Regulation
SC Office of Regulatory Staff
1401 Main Street, Ste. 900
Columbia, SC 29201
803-737-0914 work
803-917-0487 cell
803-737-0896 fax
vgainey@regstaff.sc.gov

From: James Mergist [<mailto:James.Mergist@LA.GOV>]
Sent: Friday, January 03, 2014 4:40 PM
To: 'Hall, John'; napsr-pms@napsr.net
Subject: RE: Tablets and Ipads

Happy New Year John,

Our inspectors have Dell laptops with Verizon air cards. We have an electronic inspection form application which inspectors utilize to perform inspections. When inspections are completed, the form is uploaded to the department server...Once the inspections are reviewed and accepted, the inspection is sent to an in-house site and public site.

We are able to extract some data and monitor inspections with this application.

James M. Mergist, P. E.
Director, Pipeline Division
Louisiana Department of Natural Resources
Office of Conservation
Pipeline Safety
617 North 3rd Street
Baton Rouge, LA 70802
P. O. Box 94275

Baton Rouge, LA 70804-9725
Office: 225-342-9137
Fax: 225-342-5529
James.Mergist@la.gov

-----Original Message-----

From: Hall, John [<mailto:hall@ncuc.net>]
Sent: Friday, January 03, 2014 2:45 PM
To: napsr-pms@napsr.net
Subject: Tablets and Ipads

Happy New Year,

Our Commission is looking into providing pipeline safety inspectors with either a tablet or ipad as a tool to assist with inspection processes. I'd like to find out if any program is currently using one of these devices in the field, how it's being used, and if it's seen as an advantage in conducting safety inspections?

Any information or comment you have is appreciated.

Thank you,

John Hall

Director - Pipeline Safety Section

NC Utilities Commission

919-218-2320

hall@ncuc.net<<mailto:hall@ncuc.net>>

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Allen, Tom

From: Gainey, Vernon
Sent: Monday, January 06, 2014 9:46 AM
To: Allen, Tom
Subject: FW: Tablets and Ipads

FYI.

Vernon L. Gainey, Supervisor
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SC Office of Regulatory Staff
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Columbia, SC 29201
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vgainey@regstaff.sc.gov

-----Original Message-----

From: Polly McDonald [<mailto:Polly.McDonald@rrc.state.tx.us>]
Sent: Friday, January 03, 2014 5:38 PM
To: Hall, John; napsr-pms@napsr.net
Subject: RE: Tablets and Ipads

John,
Our inspectors have Toughbooks with AT&T air cards; these are their only computers, so we have no need for them to load GoToMyPC. We also have an electronic inspection form application (Pipeline Evaluation System, or PES) that our inspectors use to document inspections and investigations. When the documentation is complete, they upload the forms to PES, after which our headquarters administrative staff send out correspondence and monitor operator response (or lack thereof). We do not have the staff to publish inspection packages on our website, but we hope to have that capability in the future. This has been helpful in managing our records (we don't print paper copies of inspection packages unless needed for a public information request, for example) but we still struggle with getting the inspectors to complete the forms using consistent marking and terminology.

Polly McDonald
Director, Pipeline Safety Division
Railroad Commission of Texas
512-463-7008

-----Original Message-----

From: Hall, John [<mailto:hall@ncuc.net>]
Sent: Friday, January 03, 2014 2:45 PM
To: napsr-pms@napsr.net
Subject: Tablets and Ipads

Happy New Year,

Our Commission is looking into providing pipeline safety inspectors with either a tablet or ipad as a tool to assist with inspection processes. I'd like to find out if any program is currently using one of these devices in the field, how it's being used, and if it's seen as an advantage in conducting safety inspections?

Any information or comment you have is appreciated.

Thank you,

John Hall

Director - Pipeline Safety Section

NC Utilities Commission

919-218-2320

ll@ncuc.net<<mailto:hall@ncuc.net>>

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Allen, Tom

From: Gainey, Vernon
Sent: Monday, January 06, 2014 2:41 PM
To: Allen, Tom
Subject: FW: Tablets and Ipads

FYI.

Vernon L. Gainey, Supervisor
Pipeline Safety
Electric and Gas Regulation
SC Office of Regulatory Staff
1401 Main Street, Ste. 900
Columbia, SC 29201
803-737-0914 work
803-917-0487 cell
803-737-0896 fax
vgainey@regstaff.sc.gov

-----Original Message-----

From: Hall, John [<mailto:hall@ncuc.net>]
Sent: Monday, January 06, 2014 2:35 PM
To: Gainey, Vernon
Subject: RE: Tablets and Ipads

Vernon,

The big problem I have is not being very tech savvy. I thought we might be able to use a tablet in the field to enter data on the field sheets we have attached to our inspection forms, make observations about the inspection, and then email to the laptop for further processing. This would eliminate having to keep track of several pieces of paper with corrosion readings and notes scribbled down, etc., as well as having to transfer this information manually. Due to the smaller screen size and keyboard I don't see a tablet or ipad replacing our laptops, but they should be convenient in the field. Some tablets are sunlight readable now. I also see an advantage having the camera and better yet, actually being able to read an email without squinting at a phone.

It sounds like James Mergist is describing a database their inspections are uploaded to. Our inspection forms and the completed reports are kept in a shared drive, but we haven't gone further than that.

Software has been an issue with ipads and tablets, but there are gadgets out there now that support editing of Word and Excel. Clark Conklin from Nebraska said they've just started using HP Elitepads that support MS software. Joe Molloy from Colorado said they are just starting to use tablets and have converted their forms to PDF. I'm pretty sure this means a fillable PDF, and it may be the way we go.

Thanks,
John

From: Gainey, Vernon [vgainey@regstaff.sc.gov]
Sent: Monday, January 06, 2014 9:59 AM
To: Hall, John
Cc: Allen, Tom
Subject: RE: Tablets and Ipads

John,
We, too, are looking into replacing our laptop computers with more advanced technology. I want us to have only one machine, perform daily inspection activities, and do administrative/record-keeping with the same machine. This includes accessing our agency main frame (several drives) and a couple other web-based applications for state employees that must be used for training requests, entering leave, submitting travel expense reports, etc. Are you familiar with an inspection software such a James Mergist mentioned? That sounds like a good set-up - if the new devices you choose will run the applications. Let us know what you find out and what you all decide to do. I appreciate any advice. If I learn more, I will let you know.

Regards,

Vernon L. Gainey, Supervisor
Pipeline Safety
Electric and Gas Regulation
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803-737-0896 fax
vgainey@regstaff.sc.gov

-----Original Message-----

From: Hall, John [<mailto:hall@ncuc.net>]
Sent: Friday, January 03, 2014 3:45 PM
To: napsr-pms@napsr.net
Subject: Tablets and Ipads

Happy New Year,

Our Commission is looking into providing pipeline safety inspectors with either a tablet or ipad as a tool to assist with inspection processes. I'd like to find out if any program is currently using one of these devices in the field, how it's being used, and if it's seen as an advantage in conducting safety inspections?

information or comment you have is appreciated.

Thank you,

John Hall

Director - Pipeline Safety Section

NC Utilities Commission

919-218-2320

hall@ncuc.net<mailto:hall@ncuc.net>

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties by an authorized state official.

Allen, Tom

From:
Sent:
To:
Subject:

Gainey, Vernon
Monday, January 06, 2014 4:15 PM
Allen, Tom
FW: Tablets and Ipads

FYI.

Vernon L. Gainey, Supervisor
Pipeline Safety
Electric and Gas Regulation
SC Office of Regulatory Staff
1401 Main Street, Ste. 900
Columbia, SC 29201
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803-917-0487 cell
803-737-0896 fax
vgainey@regstaff.sc.gov

-----Original Message-----

From: Wolfgram, Jonathan (DPS) [<mailto:Jonathan.Wolfgram@state.mn.us>]
Sent: Monday, January 06, 2014 4:07 PM
To: Hall, John; napsr-pms@napsr.net
Subject: RE: Tablets and Ipads

We have recently purchased iPads for our staff to utilize for inspections. We have setup virtual desktops that can be accessed from the iPad to basically run a windows platform via the iPad. MN utilizes as inspection database that can now be accessed on the iPad via this virtual desktop that runs on a server. It also allows other Windows applications, like WinDot to be utilized. It is our hopes to start creating some Adobe based inspection forms that can be filled out utilizing the iPad and then emailed. The iPad is a huge improvement over the Toughbook tablets that we were running previously.

The Ipad does not replace a laptop, but it is a valuable tool in its capabilities. The ability to take photos with GPS coordinates is something we hope to be able to utilize more in the future, but some work has to be done there. We have also worked on creating a mapping system that can be utilized on the Ipad to overlay pipeline mapping data on a google earth map to view facilities in great detail.

The trick with the iPad is that you have to email things back and forth between your Laptop/Desktop and the Ipad since the Ipad has no ability to install a thumb drive or external media.

Hope this helps, let me know if you have any questions.

Happy New Year!

Jon Wolfgram, P.E.
Chief Engineer

Minnesota Office of Pipeline Safety

Appendix C

Research and References of Other Industries and Governments Use of Technology

References

- <http://www.safety-inspection.com/ipad-safety-inspection-software>
- <http://www.newstimes.com/local/article/iInspections-Fire-inspectors-gearing-up-with-3745161.php>
- <http://www.readingpa.gov/content/property-maintenance-inspectors-begin-using-ipads-field>
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- <http://pe-diver.blogspot.com/2011/07/ipad-for-inspection-field-data.html>
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(double click to access power point slide)

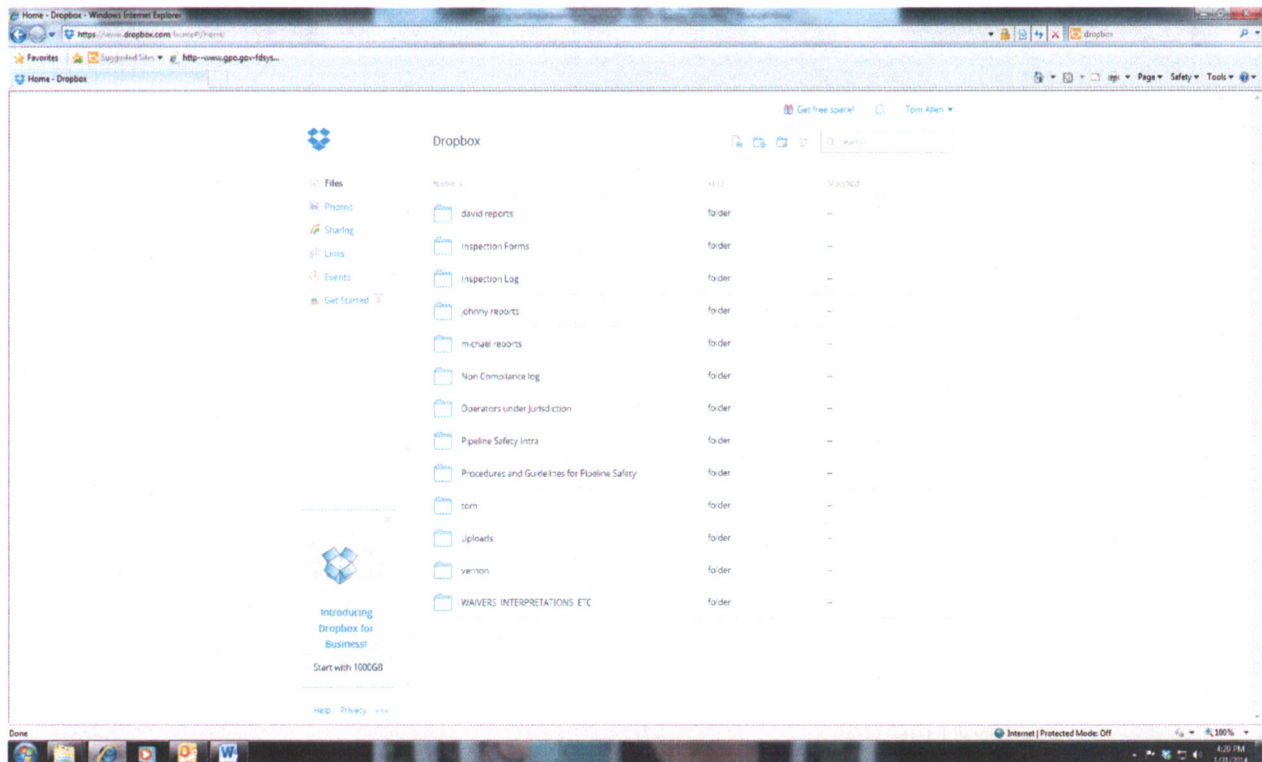
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- <http://gcn.com/articles/2010/04/19/review-ipad-10-things-good-for-gov.aspx>
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- <http://www.aecquality.com/using-an-ipad-for-construction-defect-investigations-654665782/>
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Appendix D

Dropbox Application



Appendix E

CloudOn Application



Appendix F

Procedures and Guidelines for the Pipeline Safety Program

(double click on following page to access procedures)



**SOUTH CAROLINA
OFFICE OF REGULATORY
STAFF**

**PROCEDURES AND GUIDELINES FOR
THE PIPELINE SAFETY PROGRAM**

**ELECTRIC AND GAS
REGULATION**



**SOUTH CAROLINA
OFFICE OF REGULATORY
STAFF**

**PROCEDURES AND GUIDELINES FOR
THE PIPELINE SAFETY PROGRAM**

**ELECTRIC AND GAS
REGULATION**

OFFICE OF REGULATORY STAFF OF SOUTH CAROLINA

PIPELINE SAFETY PROGRAM PROCEDURES

INSPECTION ACTIVITY

1. The Pipeline Safety Program of the Office of Regulatory Staff (ORS) performs Pipeline Safety Compliance Inspections at each of the jurisdictional Operators' facilities throughout the state of South Carolina. Each Operator within the state will be inspected at least once per calendar year. These inspections may include, but are not limited to, any combination of the following:
 - a. Standard (Comprehensive)
 - b. Design, Testing, and Construction
 - c. On-site Operator Training
 - d. Integrity Management
 - e. Operator Qualification
 - f. Incident Investigation
 - g. Damage Prevention Activities
 - h. Non-Compliance Follow-up
2. Pipeline Safety Inspectors are assigned field inspection activity by the Senior Inspector. The Senior Inspector reports directly to the Pipeline Safety Supervisor. All inspection activities are reviewed and recorded by the Pipeline Safety Supervisor, then relayed to the office Administrative personnel for filing (both electronically and hard copy).
3. Pipeline Safety Inspectors schedule visits to the ORS office to submit reports, schedule appointments, perform research, and complete other administrative duties. At the Pipeline Safety Supervisor's direction, Inspectors may be required to spend additional time in the field performing inspections or in the office. Any days Inspectors are not performing office duties will be used for field inspection activity, training, meetings, or other duties as assigned by the Supervisor or Senior Inspector.
4. When determining a schedule of inspection activities with Operators, the following must be considered:
 - a. Length of time since last inspection.
 - b. Response time from Operator regarding non-compliance issues and other

correspondence, such as tardiness or an Operator's response time.

- c. Past leakage and/or incident history.
 - d. Frequency and number of non-compliance issues observed, addressed, and documented.
 - e. Any other event(s) within or without the Operator's facilities which may impose difficulty in administering O & M and compliance efforts and procedures.
5. Priority ranking for the order and frequency of inspections is established by the Risk Ranking and other factors. Risk Rankings include but are not limited to the following:
- a. Significant percentage of Operator facilities located in metropolitan and/or highly populated areas.
 - b. Significant number of Operator facilities located and operated within high concentrations of commercial/industrial areas.
 - c. Significant number of instances of pipeline damage or failure recurring in specific geographic locations of Operator Service territory.
 - d. Greater potential for facility damage in HCA's or other sensitive areas where damage to a gas pipeline could probably cause major consequences.
 - e. Operators' damages to facilities per 1000 locate notifications.
 - f. Other indicative factors determined to be inherent to optimum compliance and safe operation of each Gas Operator's system.
6. Inspection reports containing no non-compliance issues will be turned into the office for filing within 15 days, unless additional information has been requested and needs to be added to the report. The Pipeline Safety Supervisor will be informed if there is a delay in submitting the report.
7. All non-compliances observed at the Operators' facilities will be documented and noted when reports are filed.
8. Operators will be made aware of any unsafe condition or potentially hazardous situation upon discovery and are immediately advised of the necessary corrective measures required from the Operator.
9. At the conclusion of an inspection, an exit interview is conducted. If the Inspector is unaccompanied by Operator personnel, then the Inspector will contact a representative of the Operator as soon as possible. All inspection activity will be documented electronically by categories in the Pipeline Safety Trip Log.
10. Any non-compliance or other issue observed during inspections should be discussed in the exit interview before the Inspector concludes his inspection. The Inspector will advise the Operator of concerns and may advise of possible solutions; however no definitive statements will be

made to them. If the Inspector is performing inspection activities unaccompanied, he will notify an Operator's representative as soon as practicable to discuss any concerns or issues identified during the inspection.

11. Once completed, copies of the inspection forms used in the Pipeline Safety Program will be made available to the Operator inspected at the exit interview, or as soon as all of the forms and attachments have been completed and properly documented.

All reportable incidents must be investigated. Those incidents determined to be reportable under federal reporting criteria will be subject to on-site investigation. Those incidents reportable under state criteria will be investigated on-site or by reasonable and satisfactory communications with Operator representatives. An investigation into any incident of non-compliance will remain active until all non-compliances are addressed satisfactorily and resolved according to these guidelines. Inspectors will refrain from stating probable causes of any incident or assigning responsibility or fault. All incident investigations and subsequent follow-up will be carried out according to Appendix B and C in the Guidelines for States Participating in the Pipeline Safety Program. Notification to the National Transportation Safety Board (NTSB) and/or PHMSA Southern Region Office will be initiated as required.

NON-COMPLIANCE INSPECTION GUIDELINES

1. All non-compliance issues found during inspections of Operators will be verified by the Pipeline Safety Supervisor. These issues are submitted to the Pipeline Safety Supervisor within 10 days of discovery. He will then send a non-compliance letter to the Operator within 2 days of receiving the notice of non-compliance.
2. If non-compliance which presents an immediate potential hazard is observed during an inspection, the Pipeline Safety Supervisor will be informed immediately. He will inform the Division Director and the Legal Department. This matter may be referred to the Public Service Commission for further action.
3. All non-compliances noted during inspections must have the following information included in the same report:
 - a. Specific code(s) violated
 - b. Date of non-compliance
 - c. Location of non-compliance
 - d. Any other pertinent information
4. All non-compliances observed and documented require Compliance Action on the part of the Operator. These actions are to be documented and filed with the related inspection and other forms. These actions may include, but are not limited to:

- a. Phone call to the Operator
 - b. Email message to the Operator
 - c. Facsimile correspondence with the Operator
 - d. Personal consultation as post-inspection review with the Operator
5. In conjunction with the actions listed above, a "Non-Compliance Letter" will be sent out to the Operator with all related information regarding the non-compliance. The Operator should respond in writing within 15 days documenting the corrective actions taken to achieve compliance. These letters serve to document Compliance Actions. The "Non-Compliance Letter" to the Operator includes the following:
 - a. Description of the non-compliance
 - b. Specific code(s) violated
 - c. Date of the inspection wherein the non-compliance was observed
 - d. Request for the Operator to investigate the issue
 - e. Request for a written response including the results of the Operator's investigation
 - f. Name and contact information of the Pipeline Safety Supervisor
6. In the event that there is no response to the initial "Non-Compliance Letter", a "Failure to Respond Letter" will be sent to the Operator. The Operator should respond in writing within 10 days documenting the corrective actions taken to achieve compliance. In the event that there is no response to the "Failure to Respond Letter", the Pipeline Safety Supervisor will inform the Division Director and the Legal Department. This matter may be referred to the Public Service Commission for further action.
7. All inspections that reveal a non-compliance issue(s) will receive a follow-up inspection within 30 days to determine the compliance status of the Operator.
8. If the non-compliance matter has not been resolved, a "Follow-Up Inspection Letter" will be sent to the Operator. The Operator should respond in writing within 10 days documenting the corrective actions taken to achieve compliance. In the event that there is no response to the "Follow-Up Inspection Letter", the Pipeline Safety Supervisor will inform the Division Director and the Legal Department. After consultation and in the absence of a prompt resolution, this matter may be referred to the Public Service Commission for further action.
9. If the non-compliance matter requires a long-term solution, the Pipeline Safety Supervisor will inform the Division Director and the Legal Department. After consultation, this matter may be referred to the Public Service Commission for further action.
10. Follow-up inspections with an on-going and unresolved non-compliance matter not requiring a long-term solution will receive a second follow-up inspection within 20 days of

the first follow-up inspection. If the non-compliance matter has not been resolved by the second follow-up inspection, the Pipeline Safety Supervisor will inform the Division Director and the Legal Department. After consultation, this matter may be referred to the Public Service Commission for further action.

11. All non-compliance correspondence will be kept in both hard copy and electronic format.
12. When a non-compliance issue is recorded on an inspection report, a copy of the report, a copy of the notification letter to the Operator, the Operator's response, and all related correspondence will be stored in a sub-folder and kept in a master folder at a specifically designated location in the files. All non-compliance issues are color-coded as red until they are resolved or closed.
13. It is the responsibility of the Pipeline Safety Supervisor to monitor this folder for adherence to the procedures. Additionally, each Inspector will also monitor all non-compliance issues that he recorded until the non-compliance is cleared. Once the non-compliance is cleared and no longer considered "open," the sub-folder will be removed from the master folder. The Inspector who submits the non-compliance is responsible for following the non-compliance through until it is "closed."
14. An abnormal number of non-compliances or recurring non-compliance issues will result in an Operator being placed at a higher priority for risk ranking. A risk-ranking process is completed prior to the end of each calendar year and considers an Operator's non-compliance history. Based on the risk-ranking process, those Operators with greater risk for non-compliances will be inspected at a higher priority the following year.
15. Only non-compliance issues regarding violation of the Federal Pipeline Safety Regulations are submitted in the Annual Certification Document filed with PHMSA. Issues which involve a violation(s) of SC Commission Gas Regulations only are addressed by the program procedures but not reported on the PHMSA Certification.
16. ORS may pursue a civil penalty pursuant to S.C. Code Ann. § 58-5-1030 (a) and (b) (Supp. 2012). "In determining the amount of the penalty, or the amount agreed upon in compromise, the appropriateness of the penalty to the size of the business of the person charged, the gravity of the violation, and the good faith of the person charged in attempting to achieve compliance, after notification of a violation, must be considered. The amount of the penalty when finally determined, or the amount agreed upon in compromise, may be recovered in a civil action in the court of common pleas."

RECORDS TO BE MAINTAINED BY INSPECTORS IN THE PIPELINE SAFETY OFFICE

The following records may be submitted and maintained in electronic format as approved by Pipeline Safety staff:

1. Copies of DOT annual reports (Transmission & Distribution)
2. DOT accident reports
3. Accident investigation reports
4. Verification of welders' qualifications and testing
5. Compliance inspection reports
6. Letter files containing all correspondence with Systems Operators
7. Dated Memos of important phone conversations concerning compliance with pipeline regulations
8. Copies of Operator Qualifications plans
9. Operator contact information including email addresses
10. Type 12 meter set remediation plans of affected Operators
11. Risk Ranking Operator Inspection schedule including worksheets, etc.
12. PHMSA Guidelines for States Participating in Pipeline Safety Program

RECORDS TO BE MAINTAINED BY OPERATORS IN THE PIPELINE SAFETY OFFICE

1. Copies of DOT annual reports (Transmission & Distribution)
2. Copies of DOT accident reports
3. Copies of verification of welders' qualifications
4. Progress reports relating to progress in correcting areas of noncompliance
5. Inspection and maintenance plans
6. Emergency procedures
7. Any updates and/or revisions to Operator plans and procedures
8. Notification of new construction projects of \$500,000 or more, or projects involving 25,000 feet or more of pipeline
9. Survey, discovery, and remediation of type 12 meter sets

OTHER RECORDS AND CONTACT INFORMATION

1. A master list of all jurisdictional Operators is maintained in the Pipeline Safety Program Office. Information should include the following:
 - a. The name and address of the Operator

- b. Name and title of the designated contact person(s)
 - c. Address of the contact person (if different from the Operator address)
 - d. Phone, fax, mobile phone numbers, and email address (if available) of the contact person for each Operator and an alternate contact if the primary contact is not available
2. All inspection units of the Operators (as defined in the Guidelines for States Participating in Pipeline Safety Program) and phone numbers for each are maintained in the Pipeline Safety Program Office.
3. Hard copies of all inspection activities, all non-compliance correspondence, annual reports, Operator correspondence, as well as other important documentation must be kept in hard copy form in the file section of the Pipeline Safety Program Office. Among other documents that should be kept in these files are records of Pipeline Safety Seminars, copies of annual certifications, copies of reportable incident investigations, Operators files (including CD's and DVD's), Pipeline and Hazardous Materials Safety Administration (PHMSA) and Office of Pipeline Safety (OPS) correspondence, NAPSR correspondence, etc.
4. All hard copies of files are kept in place for at least seven (7) years, at which time the Department of Archives and History will collect and store these records in a state-owned facility. Therefore, each year the files which are seven years old may be assembled and transferred to storage. These procedures are subject to change without prior notification by the Department of Archives and History.

GENERAL PROVISIONS

1. These procedures may be amended and/or updated as necessary to reflect changes in law, regulations, or ORS policy and procedure, in order to meet certain requirements or otherwise improve the efficiency of the overall process.
2. Any changes, modifications, or revisions to these procedures must be approved by the Pipeline Safety Supervisor, Gas Department Manager, and Electric and Gas Regulation Director.
3. These procedures are available to Pipeline Safety Inspectors, administrative staff, and management to assist in the normal performance of their duties.
4. These procedures reflect PHMSA Guidelines for States Participating in Pipeline Safety Program.
5. If there is a conflict between these provisions and ORS policy and procedure, the ORS

policy and procedure will govern.

TRAVEL

1. Inspectors are to work a total of 37.5 hours in a normal work week. Standard ORS working hours are from 8:30 until 5:00 including 1 hour for lunch. The ORS offers "flex time" working hours of 8:00 until 4:30 or 9:00 until 5:30. All requirements of the State Fleet Management Driver's Handbook governing operation of assigned state vehicles will be observed. Inspectors will be expected to be in their vehicles en route to their scheduled appointment by 8:30 am and not arrive home before 5:00 pm unless permission had been granted otherwise. Flex time may influence these times by moving them forward or backward 30 minutes.
2. When making trips to perform inspections, Inspectors will observe the 100-mile threshold for overnight stay. This threshold is precluded by the requirement that overnight reimbursement is not provided unless the location of the employee's stay is fifty (50) or more miles from the ORS HQ. If a trip is 100 miles or more from the Inspector's home and 50 or more miles from ORS HQ, then overnight stay will be utilized. If overnight stay is required, Inspectors will schedule two (2) day inspections if feasible. If two days' inspection activity cannot be performed at the same Operator, the inspection activity at a nearby Operator's facilities should be scheduled. If the trip is less than 100 miles from home or less than 50 miles from ORS HQ, then the Inspector is expected to drive to and from the appointment that same day.
3. Inspectors are required to utilize the Outlook calendar to record their "out-of-office" time to include meeting, training and inspection information. At a minimum, inspection information will include an Operator's name, location, contact person, telephone number and the purpose of the visit. This information should be completed on Mondays, but may be revised from the field as needed.

STAFFING

1. The Pipeline Safety staff consists of 1 (one) Program Administrator. The Administrator's title is "Pipeline Safety Supervisor." The Pipeline Safety Supervisor generally serves 80% of his working time as an administrator and 20% as a Field Inspector.
2. Staff also has 3 full-time Field Inspectors who are each expected to perform a minimum of 112 days annually on Pipeline Safety inspection activities. The Pipeline Safety Supervisor must perform a minimum of 22 days annually on Pipeline Safety inspection activities.
3. Office Administrative Personnel will provide support services as defined in this document.

REVIEW AND REVISION/UPDATE

1. These procedures are reviewed on an annual basis or more frequently as necessary, and revisions and/or updates are made when needed after they are approved by the division director.
2. Any information contained herein which becomes inaccurate or obsolete is removed or revised as soon as known and practical to do so.
3. The attachment represents the most current contact information.

ATTACHMENT #1

Pipeline Safety Staff Directory

<u>NAME</u>	<u>TITLE</u>	<u>PHONE</u>	<u>E-MAIL ADDRESS</u>
Vernon L. Gainey	Supervisor	Bus.-803.737.0914 Cell-803.917.0487	vgainey@regstaff.sc.gov Home Phone-803.475.6881
David L. DeBruhl	Senior Inspector	Bus -803.737.0912 Cell-803.917.0492	ddebruh@regstaff.sc.gov Home Phone-803.475.5927
Michael R. Bunting	Inspector	Bus.-803.737.1985 Cell-803.609.2804	mbuntin@regstaff.sc.gov Home Phone-803.712.2948
Johnny E. Eustace	Inspector	Bus.-803-737-0912 Cell-803-429-9464	jeustace@regstaff.sc.gov Home Phone-803-227-8408
Susan Hauptmann	Admin. Asst.	Bus.-803.737.1144	shauptm@regstaff.sc.gov

C DUKES SCOTT
EXECUTIVE DIRECTOR

1401 Main Street, Suite 900
Columbia, SC 29201



Phone: (803) 737-0800
Fax: (803) 737-0986

DAN F. ARNETT
CHIEF OF STAFF

JOHN W. FLITTER
DIRECTOR
ELECTRIC & GAS REGULATION

VERNON L. GAINNEY, CPM
SUPERVISOR
PIPELINE SAFETY

[date]

[address]

Re: **Non-compliance of Rule or Regulation**

Dear :

This is to advise you that our representative(s) made a routine inspection of your system on _____, pursuant to the Federal Department of Transportation's Regulations for the Transportation of Natural Gas by Pipeline and/or the Public Service Commission of South Carolina's Article 4, Rules and Regulations Governing Service Supplied by Gas Systems in South Carolina.

During the inspection, we found your system to be of concern or in non-compliance with the following:

RULE OR REGULATION

**LOCATION OF NON-COMPLIANCE
OR CONCERN**

§

Your written response detailing the results of your investigation and/or corrective actions taken to achieve compliance or alleviate the concern must be received in our office within fifteen (15) days of the date of this letter. Please send response to Vernon L. Gainey, Pipeline Safety Supervisor, Office of Regulatory Staff of South Carolina, 1401 Main St., Ste. 900, Columbia, SC 29201. If you have any questions concerning the above, or need assistance, please do not hesitate to call on us.

Sincerely,

Vernon L. Gainey

DUKES SCOTT
EXECUTIVE DIRECTOR

1401 Main Street, Suite 900
Columbia, SC 29201



Phone: (803) 737-0800
Fax: (803) 737-0986

DAN F. ARNETT
CHIEF OF STAFF

JOHN W. FLITTER
DIRECTOR
ELECTRIC & GAS REGULATION

VERNON L. GAINNEY, CPM
SUPERVISOR
PIPELINE SAFETY

[date]

[address]

Re: **Non-compliance Follow-up Inspection**

Dear :

This is to advise you that our representative(s) made a follow-up inspection of your system on _____, pursuant to the Federal Department of Transportation's Regulations for the Transportation of Natural Gas by Pipeline and/or the Public Service Commission of South Carolina's Article 4, Rules and Regulations Governing Service Supplied by Gas Systems in South Carolina.

According to the report of this follow-up inspection, we found your system of concern or to be in non-compliance with the following:

RULE OR REGULATION

**LOCATION OF NON-COMPLIANCE
OR CONCERN**

§

This follow-up inspection identified an on-going and unresolved non-compliance matter. Your written response detailing the results of your investigation and/or corrective actions taken to achieve compliance is a must. Please send your response to Vernon L. Gainney, Pipeline Safety Supervisor, Office of Regulatory Staff of South Carolina, 1401 Main St., Ste. 900, Columbia, SC 29201. If you have any questions concerning the above, or need assistance, please do not hesitate to call on us.

Sincerely,

Vernon L. Gainney

C DUKES SCOTT
EXECUTIVE DIRECTOR

1401 Main Street, Suite 900
Columbia, SC 29201



Phone: (803) 737-0800
Fax: (803) 737-0801

DAN F. ARNETT
CHIEF OF STAFF

JOHN W. FLITTER
DIRECTOR
ELECTRIC & GAS REGULATION

VERNON L. GAINNEY, CPM
SUPERVISOR
PIPELINE SAFETY

[date]

VIA CERTIFIED MAIL

[address]

Re: **Failure to Respond**

Dear :

Please be advised that we have not received your written response to our [DATE] letter of non-compliance (attached). Your written response detailing the results of your investigation and/or corrective actions taken to achieve compliance or alleviate the concern must be received in our office within ten (10) days of the date of this letter. Please send your response to Vernon L. Gainney, Pipeline Safety Supervisor, Office of Regulatory Staff of South Carolina, 1401 Main St., Ste. 900, Columbia, SC 29201. If you have any questions concerning the above, or need assistance, please do not hesitate to call on us.

Sincerely,

Vernon L. Gainney

Enclosure